

(12) **United States Patent**
Jacobsen et al.

(10) **Patent No.:** **US 11,237,594 B2**
(45) **Date of Patent:** ***Feb. 1, 2022**

(54) **HEADSET COMPUTER THAT USES
MOTION AND VOICE COMMANDS TO
CONTROL INFORMATION DISPLAY AND
REMOTE DEVICES**

(58) **Field of Classification Search**
CPC combination set(s) only.
See application file for complete search history.

(71) Applicant: **Kopin Corporation**, Westborough, MA
(US)

(56) **References Cited**

U.S. PATENT DOCUMENTS

(72) Inventors: **Jeffrey J. Jacobsen**, Hollister, CA
(US); **Christopher Parkinson**,
Richland, WA (US); **Stephen A.**
Pombo, Campbell, CA (US)

4,567,479 A 1/1986 Boyd
5,005,213 A 4/1991 Hanson et al.
(Continued)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **Kopin Corporation**, Westborough, MA
(US)

CN 1698048 A 11/2005
CN 1702607 A 11/2005
(Continued)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-
claimer.

OTHER PUBLICATIONS

International Preliminary Report on Patentability for PCT/US2011/
023337 dated Aug. 16, 2012; entitled "Wireless Hands-Free Com-
puting Headset with Detachable Accessories Controllable by Motion,
Body Gesture and/or Vocal Commands", 8 pages.

(21) Appl. No.: **16/748,668**

(22) Filed: **Jan. 21, 2020**

(65) **Prior Publication Data**
US 2020/0159283 A1 May 21, 2020

Primary Examiner — Md N Haque
(74) *Attorney, Agent, or Firm* — Hamilton, Brook, Smith
& Reynolds, P.C.

Related U.S. Application Data

(63) Continuation of application No. 13/468,207, filed on
May 10, 2012, now Pat. No. 10,627,860.
(Continued)

(57) **ABSTRACT**

(51) **Int. Cl.**
H04N 7/18 (2006.01)
G06F 1/16 (2006.01)
(Continued)

A wireless hands-free portable headset computer with a
micro display arranged near but below a wearer's eye in a
peripheral vision area not blocking the wearer's main line of
sight. The headset computer can display an image or por-
tions of an image, wherein the portions can be enlarged. The
headset computer also can be equipped with peripheral
devices, such as light sources and cameras that can emit and
detect, respectively, visible light and invisible radiation,
such as infrared radiation and ultraviolet radiation. The
peripheral devices are controllable by the wearer by voice
command or by gesture. The headset computer also can be
(Continued)

(52) **U.S. Cl.**
CPC **G06F 1/163** (2013.01); **G05D 1/0016**
(2013.01); **G05D 1/0038** (2013.01); **G06F**
3/011 (2013.01); **G06F 3/012** (2013.01); **G06F**
3/167 (2013.01)

